

Amendments to the Claims:

Claims 1, 2, 4-21, and 23-41 have been amended. Claims 3 and 22 have been canceled without prejudice. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1 1. (Currently Amended) A computer-implemented method of displaying a
2 document using a browser, the method comprising:
3 accessing the document;
4 receiving information identifying a set of one or more concepts;
5 determining a set of text patterns associated with the set of concepts, the set of
6 text patterns comprising one or more text patterns associated with the one or more concepts in
7 the set of concepts;
8 searching the document to identify occurrences of one or more text patterns from
9 the set of text patterns in the document which are relevant to a plurality of concepts; and
10 marking locations of the text patterns in the document; and
11 displaying the document using the browser such that the occurrences of the text
12 patterns in the document which are relevant to the plurality of concepts are annotated.

- 1 2. (Currently Amended) The method of claim 1 wherein the browser is an
2 Internet Explorer browser and the searching ~~and marking~~ use uses information about the
3 document stored in a Document Object Model configured by the Internet Explorer browser.

- 1 3. (Canceled)

- 1 4. (Currently Amended) The method of claim 1 wherein:
2 the browser is an Internet Explorer browser; and
3 the searching ~~and marking~~ is performed using methods provided by an
4 IHTMLTxtRange interface.

- 1 5. (Currently Amended) The method of claim 1 wherein:

2 the browser is an Internet Explorer browser; and
3 the searching and marking is performed using methods provided by an
4 IMarkupServices interface.

3 for each occurrence of a text pattern from the set of text patterns identified as
4 ~~being relevant to a concept from the plurality of concepts in the document:~~

5 determining the concept to with which the text pattern occurrence is
6 relevant associated based upon from the annotation tags surrounding the text pattern occurrence;

7 determining style information to be used for annotating the text pattern
8 occurrence, wherein the style information is associated with the concept to with which the text
9 pattern is ~~relevant~~ associated; and

10 annotating the text pattern occurrence based on the style information.

4 displaying a relevance indicator for each concept in the plurality set of concepts
5 based on the score for the concept.

1 10. (Currently Amended) The method of claim 9 wherein calculating the
2 score for each concept in the plurality set of concepts comprises:

3 for each concept in the plurality set of concepts:

4 determining frequency of the occurrences of text patterns associated with
5 the concept in the document ~~identified as being relevant to the concept~~; and
6 calculating the score based on the frequency of the occurrences of the text
7 patterns.

1 11. (Currently Amended) A computer-implemented method of displaying a
2 multi-page document using a browser, the method comprising:

3 accessing a multi-page document;

4 displaying a section of the multi-page document in a first viewing area of a

5 display;

6 determining information about the extracting contents of the multi-page
7 document, the contents comprising text and one or more elements;

8 displaying a single thumbnail image in a second viewing area of the display based
9 on the contents extracted information determined from the multi-page document, the single
10 thumbnail image displaying the contents of the multi-page document in a continuous form; and
11 emphasizing an area of the single thumbnail image corresponding to the section of
12 the multi-page document displayed in the first viewing area.

12. (Currently Amended) The method of claim 11 wherein:

2 determining information about extracting the contents of the multi-page document
3 comprises:

4 determining dimension information for the contents; and
5 determining coordinate information for the contents; and
6 displaying the single thumbnail image comprises:

7 displaying the contents in the single thumbnail image based on the
8 dimension and coordinate information for the contents.

4 for each content:

5 determining position of the content in the single thumbnail image by
6 dividing the coordinate and dimension information for the content by a reduction ratio.

14. (Currently Amended) The method of claim 11 wherein ~~determining~~
information about extracting the contents of the multi-page document comprises:

3 determining information about extracting one or more text entities contained in
4 the multi-page document;

5 determining dimension and coordinate information for the one or more text
6 entities;

7 determining if the one or more text entities are relevant to one or more concepts
8 from a set a plurality of concepts; and

9 if a text entity is relevant to a concept in the plurality set of concepts:

10 associating each the text entity that is relevant to a concept with style information
11 for the concept, wherein the style information for a concept indicates indicating a manner of
12 annotating text entities in the multi-page document which are relevant to the concept.

1 15. (Currently Amended) The method of claim 14 wherein displaying the
2 single thumbnail image comprises:

3 if a text entity is relevant to a concept in the plurality of concepts:

4 for each text entity that is relevant to a concept from the set of concepts.

5 displaying the text entity in the single thumbnail image using the style information for the
6 concept.

1 16. (Currently Amended) The method of claim 15 further comprising:
2 modifying the style information for a concept;
3 in response to the modification:
4 identifying text entities in the multi-page document which are relevant to
5 the concept; and
6 dynamically changing the display of the identified text entities in the
7 single thumbnail image based on the modified style information.

1 17. (Currently Amended) The method of claim 11 wherein determining
2 information about extracting the contents of the multi-page document comprises:
3 determining information about extracting one or more forms contained in the
4 multi-page document; and
5 determining dimension and coordinate information for the one or more forms.

1 18. (Currently Amended) The method of claim 11 wherein determining
2 information about extracting the contents of the multi-page document comprises:
3 determining information about extracting one or more image elements contained
4 in the multi-page document; and
5 determining dimension and coordinate information for the one or more image
6 elements.

1 19. (Currently Amended) A computer-implemented method of displaying a
2 multi-page document using a browser, the method comprising:
3 accessing the multi-page document;
4 receiving information identifying a set of one or more concepts;
5 determining a set of text patterns associated with the set of concepts, the set of
6 text patterns comprising one or more text patterns associated with the one or more concepts in
7 the set of concepts;

8 searching the multi-page document to identify occurrences of one or more text
9 patterns from the set of text patterns in the document which are relevant to a plurality of
10 concepts;
11 marking locations of the text patterns in the document;
12 displaying a section of the multi-page document in a first viewing area of a
13 display such that the occurrences of the text patterns in the multi-page document which are
14 relevant to a plurality of concepts are annotated;
15 determining information about the extracting contents of the multi-page
16 document, the contents comprising text and one or more elements;
17 displaying a single thumbnail image in a second viewing area of the display based
18 on the contents extracted information determined from the multi-page document, the single
19 thumbnail image displaying the contents of the multi-page document in a continuous form; and
20 emphasizing an area of the single thumbnail image corresponding to the section of
21 the multi-page document displayed in the first viewing area.

1 20. (Currently Amended) A system for displaying a document using a
2 browser, the system comprising:
3 a processor; and
4 a memory coupled to the processor and configured to store a plurality of modules
5 for execution by the processor, the plurality of modules module including:
6 a module for accessing the document;
7 a module for receiving information identifying a set of one or more
8 concepts;
9 a module for determining a set of text patterns associated with the set of
10 concepts, the set of text patterns comprising one or more text patterns associated with the
11 one or more concepts in the set of concepts;
12 a module for searching the document to identify occurrences of one or
13 more text patterns from the set of text patterns in the document which are relevant to a plurality
14 of concepts; and

15 ~~a module for marking locations of the text patterns in the document; and~~
16 ~~a module for displaying the document using the browser such that the~~
17 ~~occurrences of the text patterns in the document which are relevant to the plurality of concepts~~
18 are annotated.

1 21. (Currently Amended) The system of claim 20 wherein the browser is an
2 Internet Explorer browser and the module for searching ~~and the module for marking use uses~~
3 information about the document stored in a Document Object Model configured by the Internet
4 Explorer browser.

1 22. (Canceled)

1 23. (Currently Amended) The system of claim 20 wherein:
2 the browser is an Internet Explorer browser; and
3 the ~~modules~~ module for searching ~~and marking use uses~~ methods provided by an
4 IHTMLTxtRange interface.

1 24. (Currently Amended) The system of claim 20 wherein:
2 the browser is an Internet Explorer browser; and
3 the ~~modules~~ module for searching ~~and marking use uses~~ methods provided by an
4 IMarkupServices interface.

1 25. (Currently Amended) The system of claim 20 wherein the plurality of
2 modules comprises a module for marking the locations occurrences of the text patterns from the
3 set of text patterns in the document comprises a module for by inserting annotation tags in front
4 of and after each occurrence of a text pattern identified in the document to be relevant to a
5 concept from the plurality of concepts, wherein the annotation tags for each occurrence of a text
6 pattern identify the concept to with which the text pattern is relevant associated.

1 26. (Currently Amended) The system of claim 25 wherein the module for
2 displaying the document comprises:

3 for each occurrence of a text pattern from the set of text patterns identified as
4 ~~being relevant to a concept from the plurality of concepts in the document:~~
5 a module for determining the concept ~~to~~ with which the text pattern
6 occurrence is relevant associated based upon ~~from~~ the annotation tags surrounding the text
7 pattern occurrence;
8 a module for determining style information to be used for annotating the
9 text pattern occurrence, wherein the style information is associated with the concept ~~to~~ with
10 which the text pattern is ~~relevant associated~~; and
11 a module for annotating the text pattern occurrence based on the style
12 information.

1 27. (Currently Amended) The system of claim 26 wherein the module for
2 annotating the text pattern occurrence comprises a module for highlighting the text pattern
3 occurrence in a color indicated by the style information.

1 28. (Currently Amended) The system of claim 20 wherein the plurality of
2 modules stored in the memory further ~~comprise~~ comprises:
3 a module for calculating a score for each concept in the plurality set of concepts,
4 the score indicating relevance of the document to the concept; and
5 a module for displaying a relevance indicator for each concept in the plurality set
6 of concepts based on the score for the concept.

1 29. (Currently Amended) The system of claim 28 wherein the module for
2 calculating the score for each concept in the plurality set of concepts comprises:
3 for each concept in the plurality set of concepts:
4 a module for determining frequency of the occurrences of text patterns
5 associated with the concept in the document ~~identified as being relevant to the concept~~; and
6 a module for calculating the score based on the frequency of the
7 occurrences of the text patterns.

1 30. (Currently Amended) A system for displaying a multi-page document
2 using a browser, the system comprising:
3 a processor; and
4 a memory coupled to the processor and configured to store a plurality of modules
5 for execution by the processor, the plurality of modules module including:
6 a module for accessing a multi-page document;
7 a module for displaying a section of the multi-page document in a first
8 viewing area of a display;
9 a module for extracting contents of the multi-page document, the contents
10 comprising text and one or more elements;
11 a module for displaying a single thumbnail image in a second viewing area
12 of the display based on the contents extracted information determined from the multi-page
13 document, the single thumbnail image displaying the contents of the multi-page document in a
14 continuous form; and
15 a module for emphasizing an area of the single thumbnail image
16 corresponding to the section of the multi-page document displayed in the first viewing area.

1 31. (Currently Amended) The system of claim 30 wherein:
2 the module for determining information about extracting the contents of the multi-
3 page document comprises:
4 a module for determining dimension information for the contents; and
5 a module for determining coordinate information for the contents; and
6 the module for displaying the single thumbnail image comprises:
7 a module for displaying the contents in the single thumbnail image based
8 on the dimension and coordinate information for the contents.
1 32. (Currently Amended) The system of claim 31 wherein the module for
2 displaying the contents in the single thumbnail image based on the dimension and coordinate
3 information for the contents comprises:

4 for each content:

5 a module for determining position of the content in the single thumbnail
6 image by dividing the coordinate and dimension information for the content by a reduction ratio.

1 33. (Currently Amended) The system of claim 30 wherein the module for
2 ~~determining information about extracting~~ the contents of the multi-page document comprises:
3 a module for ~~determining information about extracting~~ one or more text entities
4 contained in the multi-page document;

5 a module for determining dimension and coordinate information for the one or
6 more text entities;

7 a module for determining if the one or more text entities are relevant to one or
8 more concepts from a set a plurality of concepts; and

9 if a text entity is relevant to a concept in the ~~plurality of concepts~~:

10 a module for associating each text entity that is relevant to a concept the text
11 entity with style information for the concept, wherein the style information for a concept
12 indicates indicating a manner of annotating text entities ~~in the multi-page document~~ which are
13 relevant to the concept.

1 34. (Currently Amended) The system of claim 33 wherein the module for
2 displaying the single thumbnail image comprises:

3 if a text entity is relevant to a concept in the ~~plurality of concepts~~:

4 a module for displaying the each text entity in the single thumbnail image that is
5 relevant to a concept from the set of concepts using the style information for the concept.

1 35. (Currently Amended) The system of claim 34 wherein the plurality of
2 modules stored in the memory further comprise comprises:

3 a module for modifying the style information for a concept;
4 in response to the modification:

5 a module for identifying text entities in the multi-page document which
6 are relevant to the concept; and

7 a module for dynamically changing the display of the identified text
8 entities in the single thumbnail image based on the modified style information.

1 36. (Currently Amended) The system of claim 30 wherein the module for
2 determining information about extracting the contents of the multi-page document comprises:
3 a module for determining information about extracting one or more forms
4 contained in the multi-page document; and
5 a module for determining dimension and coordinate information for the one or
6 more forms.

1 37. (Currently Amended) The system of claim 30 wherein the module for
2 determining information about extracting the contents of the multi-page document comprises:
3 a module for determining information about extracting one or more image
4 elements contained in the multi-page document; and
5 a module for determining dimension and coordinate information for the one or
6 more image elements.

1 38. (Currently Amended) A system for displaying a multi-page document
2 using a browser, the system comprising:
3 a processor; and
4 a memory coupled to the processor and configured to store a plurality of modules
5 for execution by the processor, the plurality of modules module including:
6 a module for accessing the multi-page document;
7 a module for receiving information identifying a set of one or more
8 concepts;
9 a module for determining a set of text patterns associated with the set of
10 concepts, the set of text patterns comprising one or more text patterns associated with the
11 one or more concepts in the set of concepts;

12 a module for searching the multi-page document to occurrences of one or
13 more text patterns from the set of text patterns in the document which are relevant to a plurality
14 of concepts;

15 a module for marking locations of the text patterns in the document;

16 a module for displaying a section of the multi-page document in a first
17 viewing area of a display such that the occurrences of the text patterns in the multi-page
18 document which are relevant to a plurality of concepts are annotated;

19 a module for determining information about the extracting contents of the
20 multi-page document, the contents comprising text and one or more elements;

21 a module for displaying a single thumbnail image in a second viewing area
22 of the display based on the contents extracted information determined from the multi-page
23 document, the single thumbnail image displaying the contents of the multi-page document in a
24 continuous form; and

25 a module for emphasizing an area of the single thumbnail image
26 corresponding to the section of the multi-page document displayed in the first viewing area.

1 39. (Currently Amended) A computer program product stored on a computer
2 readable storage medium for displaying a document using a browser, the computer program
3 product comprising:

4 code for receiving accessing the document;

5 code for receiving information identifying a set of one or more concepts;

6 code for determining a set of text patterns associated with the set of concepts, the
7 set of text patterns comprising one or more text patterns associated with the one or more
8 concepts in the set of concepts;

9 code for searching the document to identify occurrences of one or more text
10 patterns from the set of text patterns in the document which are relevant to a plurality of
11 concepts; and

12 code for marking locations of the text patterns in the document; and

13 code for displaying the document using the browser such that the occurrences of
14 the text patterns in the document which are relevant to the plurality of concepts are annotated.

1 40. (Currently Amended) A computer program product stored on a computer
2 readable storage medium for displaying a multi-page document using a browser, the computer
3 program product comprising:

4 code for accessing a multi-page document;

5 code for displaying a section of the multi-page document in a first viewing area of
6 a display;

7 code for determining information about the extracting contents of the multi-page
8 document, the contents comprising text and one or more elements;

9 code for displaying a single thumbnail image in a second viewing area of the
10 display based on the contents extracted information determined from the multi-page document,
11 the single thumbnail image displaying the contents of the multi-page document in a continuous
12 form; and

13 code for emphasizing an area of the single thumbnail image corresponding to the
14 section of the multi-page document displayed in the first viewing area.

1 41. (Currently Amended) A computer program product stored on a computer
2 readable storage medium for displaying a multi-page document using a browser, the computer
3 program product comprising:

4 code for accessing the multi-page document;

5 code for receiving information identifying a set of one or more concepts;

6 code for determining a set of text patterns associated with the set of concepts, the
7 set of text patterns comprising one or more text patterns associated with each concept in the set
8 of concepts;

9 code for searching the multi-page document to identify occurrences of one or
10 more text patterns from the set of text patterns in the document which are relevant to a plurality
11 of concepts;

12 code for marking locations of the text patterns in the document;

13 code for displaying a section of the multi-page document in a first viewing area of
14 a display such that the occurrences of the text patterns in the multi-page document ~~which are~~
15 relevant to a plurality of concepts are annotated;
16 code for ~~determining information about the~~ extracting contents of the multi-page
17 document, the contents comprising text and one or more elements;
18 code for displaying a single thumbnail image in a second viewing area of the
19 display based on the contents extracted information determined from the multi-page document,
20 the single thumbnail image displaying the contents of the multi-page document in a continuous
21 form; and
22 code for emphasizing an area of the single thumbnail image corresponding to the
23 section of the multi-page document displayed in the first viewing area.